Winter 12-10-2002

Motivation and Consumer Knowledge on Processing Online Advertisement

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Abstract

This study investigated how consumers use their motivation and objective knowledge to process online advertisement. The laboratory experiment tested several hypotheses on the determinants of consumers' process measures toward the ad. The findings suggested that involved subjects tended to process the ad more to a certain point until subjects reached the highest involvement level and did not feel the need to processing the ad anymore. In addition, when objective knowledge remained an accessible source to evaluate the ad, it hindered the persuasion effects of the ad. Implications for advertisers and the direction of future research are also presented.

1. Introduction

The increasing number of people accessing the Internet is fueling the increase of online sales. "Even though this amount could change due to the economic slowdown, eCommerce still won't shrink. Conversely, if the current economic storm passes early, eCommerce will experience substantial growth in 2002" (URL: http://www.forrester.com/ER/Press/Release/0,1769,651,00.html) [12]. New communication technologies are creating new challenges for the advertising industry. While the Internet represents new possibilities for advertisers, there is little information available regarding how to take advantage of the Internet.

The Internet makes it possible to create ads or information that are more targeted, accessible, and more personal. Thus, seeing an online banner ad can be an experience in which the consumer participates and is engaged. How engaged they are may depend on how motivated and knowledgeable they are. While separating the effects of involvement and domain knowledge "remains problematic because they are related" [6, p.213], several studies and untested propositions do suggest they can independently influence information processing [30; 1; 16; 4]. This is especially true when knowledge is usually distinguished among three types: objective knowledge, subjective (self-assessed) knowledge, and product-related experience (familiarity). By studying these factors, this study can answer or test how these factors independently influence consumer's information processing toward online advertisement. Moreover, the results might suggest a better strategy to target different types of consumers to influence their processing towards online advertisement.

2. Literature Review and Study Model

Advertising has been defined traditionally as "a form of controlled communication that attempts to persuade consumers, through use of a variety of strategies and appeals, to buy or use a particular product or service" [10, p.564]. It is also the "paid communication from an identified sponsor using mass media to persuade or influence an audience" [31, p.13]. Clearly, the central goal of advertising is to persuade consumers to purchase a product or service. Today, many new channels of mass communication are developed, exposing the public to an increasing number of mediated messages [11; 28]. Consumers are exposed to hundreds of advertising appeals delivered via television, magazines, newspapers, billboards, direct mail solicitation, e-mail, Internet banner ads and more. As a result, consumers have developed a more sophisticated understanding of the mass media and of advertising [5]. All of the above reasons create a greater challenge for advertisers to attract attention, especially thoughtful attention, to their messages either in traditional media environment or online environment.

Interactive advertising (IA) often means simply advertising on the Internet or online advertising [18]. Leckenby and Li defined IA as the paid and unpaid presentation and promotion of products or services by an identified sponsor through mediated means involving mutual action between consumers and producers [20]. IA technologies will be used to gather important consumer information, which will be accomplished through increased interactive means of asking questions (e.g., online surveys) and through more advanced forms of setting cookies and analyzing log files, keeping a record of interactive media experiences.

The ability, motivation, and opportunity (AMO) model in the consumer psychology literature suggests that ability, motivation, and opportunity provide frameworks theoretically to address strategies for effective communication with consumers [22; 15]. These three factors moderate or serve as antecedents to information processing by consumers and suggest that consumers engage in progressive levels of processing, ranging from superficial to deep processing [22; 15; 2; 3]. Motivation refers to "heightening arousal so that audiences are ready, willing, interested, or desire to process a message" and "represents a predisposition or preparedness to allocate

precious cognitive resources to processing information" [15, p.466]. Motivation can moderate the linkage between exposure, cognitive processing, and consequence of cognitive responses and attitude formation [22]. Ability refers to "the need to maximize an individual's skills or proficiencies in interpreting a message" [15, p.466]. High-ability consumers who are knowledgeable about a topic can process information more efficiently and schematically than can novices [1; 15].

MacInnis and Jaworski offered a six-stage model that began with the feature analysis of message, followed by basic categorization of the message and topic, meaning analysis, information integration with personal experience, mental rehearsal, and mental construction of product attributes and benefits [22]. Certainly, the conceptual origin of emphasizing ability, motivation, and opportunity can be traced to the development of dual processing models in the social psychology literature including the Elaboration Likelihood Model (ELM) and the Heuristic-Systematic Model (HSM) [26; 8]. Both proposed that relevant message played a motivational role in the strategies consumers used to process advertising information.

Consumer knowledge can be defined as information that is learned, organized, represented, and stored in memory so it can be retrieved, used, and updated to create inherent, meaningful and useful property of the knowledge itself and make analogy, inference, reasoning, and elaboration regarding product messages [1; 16]. Consumer knowledge has two major components: familiarity and expertise. While familiarity accumulates from product-related experiences, expertise is defined relative to a performance criterion and implies increased ability to perform the product-related tasks successfully [1].

While definitions of consumer knowledge vary in the literature, the study uses the most common distinction that defined three types of knowledge, objective knowledge, subjective (self-assessed) knowledge, and product-related experience (familiarity). While three types of knowledge are usually correlated, the study uses subjective knowledge and objective knowledge as two different types of knowledge. "Subjective knowledge can be thought of as including an individual's degree of confidence in his/her knowledge, while objective knowledge refers only to what an individual actually knows" [4, p.2]. The knowledge that consumers possess and the way it is organized lies at the heart of the understanding of consumer cognition. An understanding of what consumers know about products underpins what marketers and scholars of consumer behavior know about the processes, such as product preferences, attitudes toward brands, and purchase decisions.

An integrated model is illustrated in Figure 1. The model demonstrates that PI depends on consumers' evaluative dimensions of processing information. The rationale for the conceptual framework is to separate the different influences from knowledge and involvement (motivation). In this case, the study can test how they independently influence information processing toward consistent or inconsistent messages across the content types. The hypotheses with rationales are described in the following section.

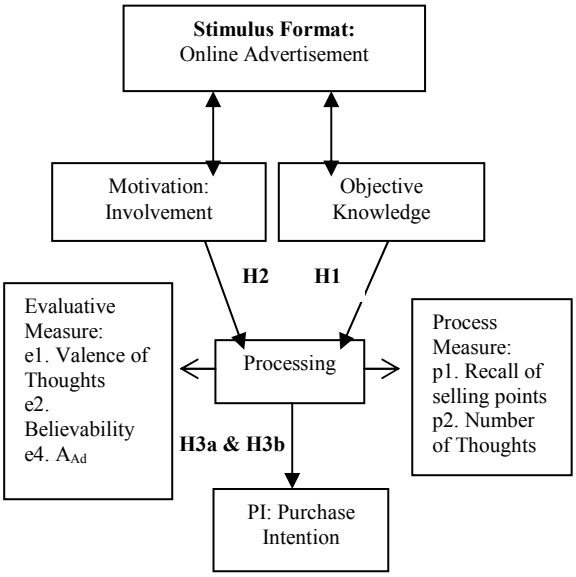

Figure 1: Conceptual Model

Highly motivated consumers process information effortfully or systematically, whereas consumers with low motivation rely on cognitive shortcuts such as peripheral cues or heuristics. Central route or systematic processing is more enduring than persuasion that relies on peripheral route or heuristic processing [14; 21; 22; 26; 7; 8]. MacInnis, Moorman, and Jaworski suggested in-depth processing is desirable for two reasons: first, attention is likely to be modest as a result of too much information and distractions in the typical communication setting [21]. Second, enhancing levels of processing evokes more enduring memory and attitude change. It is possible that reading about high-involvement products led to lower recall and cognitive response scores because readers felt confident and saw no need to process the information more thoroughly. In this case, the study hypothesizes:

H1: Medium-involved subjects are likely to have a better process measures toward the ads than low-involved subject.

Ability refers to "the need to maximize an individual's skills or proficiencies in interpreting a message" [15, p.466]. High-ability consumers who are knowledgeable about a topic can process information more efficiently and schematically than can novices [1; 15]. Objective knowledge is activated when the consumers feel the needs to [1; 16; 6]. When consumers are not motivated to process information, objective knowledge may not come into work since further processing is not desirable. In other words, the usage of objective knowledge should be evident when the expert not novice is motivated to process the information.

Even though it might be possible that low involved consumers have very high objective knowledge, they might

not be motivated to active the objective knowledge from long-term memory to comprehend and elaborate on the information. Brucks found that efficiency in information search could occur in attribute evaluation among knowledgeable consumers who only search useful information [4]. In this case, there is a negative relationship between knowledge and the possible number of message examined. On the other hand, "knowledge facilitation explanation" [4, p.4] could happen when the positive relationship between knowledge and the possible number of message examined. In this case, the inverted-U shaped relationship may result. Since there is possibility that both explanations could happen, it is hypothesized that:

H2: Objective knowledge is related to evaluative and process measures of the ad. The relationship may be negative or positive.

The proposed framework hypothesizes that purchase intention depends on positive evaluative measure responses, a function of valence of product-related thoughts, and attitude toward the ad. These evaluative measures and attitude mainly are affected by how subjects process the information. Given adequate ability, highly motivated consumers process information effortfully or systematically, whereas consumers with low motivation rely on cognitive shortcuts such as peripheral cues or heuristics. According to MacInnis and Jaworski [22], deep processing often accompanied communication exchanges in which the parties were fully engaged. However, because of consumers' low objective knowledge about and low involvement in a topic, they were unlikely to engage in any more than superficial processing. Their processing of messages was likely to be limited to feature analysis, categorization, and elementary meaning analysis. In other words, subjects with low motivation and ability to process might be the group that is easier to be persuaded. In this case, the study hypothesizes:

H3a: Purchase intention is increased by positive evaluative measure responses, a function of valence of product-related thoughts, and attitude toward the ad;

H3b: Among subjects who have high objective knowledge, purchase intention should be lower since they are more difficult to be persuaded.

3. Methodology

Several sections of laboratory experiment were conducted to test the hypotheses, identified in the previous section. This section describes the sample, the experimental design, task, manipulations, and the constructs used to measure and test the hypotheses. To investigate the hypotheses, a 4 by 4 factorial design was employed. The 4 × 4 factorial design manipulated four levels of product involvement and four levels of objective knowledge. The product chosen for the study was a tennis racquet. Tennis was selected because it was a product category that previous research studies used and proved to be a good product category for studying [6; 13]. Banner ad was selected as the advertising format because it is the most common usage and has proved to be successful and relatively easy to implement [9]. The power banner ad designed to communicate evidence of relative superiority claimed that the Head i.S6 has superb power for shots.

The size of online ad (550 by 240 pixels) was measured to be located at the central part of viewing range of the monitors. Since 24 computers at the lab were all the same type with exactly the same monitors, this nullified the possibility that subjects would have performed the experimental task differently due to different computers they used. With 19-inch monitor at the computer lab, the ad was shown to be in the center when subjects went to the homepage. Two hundreds and twenty one students were recruited from different levels of tennis class, beginning, intermediate beginning, intermediate, and advanced intermediate classes, taught at a large U.S. university. As an incentive for their participation, the subjects received credit points when they participated in the study.

The questionnaires were developed from the literature and using literature as guides to adapt, when necessary, to the specific focus of the study. Subjects first answered the first stage of recruiting questionnaire including measures of product involvement and objective knowledge. Measures of objective knowledge employed Moreau et al. [24] and Celsi and Olson's [6] approaches including three questions, previously used by Celsi and Olson [6, p.217]. These questions can reflect subjects' expertise regarding playing tennis. In addition, 12-item true-false questions were used to access subjects' objective knowledge about selecting a tennis racquet (see Table 1). The highest score was 14 while the lowest score was 2 based on a possible range from 1-15.

Table 1: Objective Knowledge Scores (4 Groups)

	N	%	Mean	SD
Low Objective Knowledge	57	25.8	6.07_{a}***	1.24
Low-medium Objective Knowledge	45	20.4	8_{b}***	.00
Medium-high Objective Knowledge	77	34.8	9.51_{c}***	.5
High Objective Knowledge	42	19	11.76_{d}***	.88
Total	221	100	8.74	2.13

Note: Means that do not share a common subscript significantly differ.
*** $p < .000$; $F=455.291$, $df=3,217$, $p=.000$

To measure the constructs of interest, the study also employed several multiple-item scales, used by other researchers and proved to have adequate reliability and validity. Subjects' product enduring involvement scores were measured by Zaichkowsky's [32] Personal Involvement Inventory (PII). Table 2 showed the possible three or four different levels of average involvement scores. The lowest average involvement score was 1 while the highest was 7.

Table 2: Involvement Score (4 Groups)

	N	%	Mean	SD	ANOVA
Low Involvement	55	24.9	2.84_a***	.85	F=396.412
Low-medium Involvement	54	24.4	4.19_b***	.19	df=3, 217 P=.000
Medium-high Involvement	57	25.8	4.92_c***	.20	
High Involvement	55	24.9	5.99_d***	.43	
Total	221	100	4.49	1.25	

Note: Means that do not share a common subscript significantly differ.
*** p < .000

Purchase intention was measured by a 7-point semantic differential scale from the lowest to the highest. Quality of information was measured by asking subjects whether the overall information presented in the ad was "accurate," "truthful," and "factual." Believability and persuasion of the ad were measured by asking subjects whether the ad was "convincing" and "believable." The study also used the measures of Advertising Message Involvement (AMI), proposed by Laczniak, Kempf, and Muehling [19] to form message involvement measures toward the ad. The items with 1-7 scaling included four components: (1) self-reported attention to the message claims, (2) perceived relevance of messages, (3) perceived engagement of messages, and (4) overall attention paid to the messages.

The numbers of selling points recalled from the messages were measured by the free-recall task. Each successfully recalled point was given a value of one and the sum of all points was the final score of recalled selling points for each subject. To qualify as recall of selling point, an examination of the recall data had to demonstrate memory of the key messages in the ad.

Product-related thoughts were measured by thought elicitation task in 3-minute period. After the thoughts elicitation task, a few questions were asked to determine whether the appeals in the ad were perceived to provide the best evidence of performance superiority (i.e., "Did the ad make you believe that tennis racquets provide increased power?). Also, subjects were asked whether the appeals provided the information for making a better purchase decision (i.e., "Without considering specific message information, did the ad make you feel better about your decision?). These questions were used as the general attitude toward the ad.

Control variables included attitude toward online shopping, credibility of Tennis Magazine and the questions regarding asking subjects' past experiences of purchasing a racquet and playing tennis. Bipolar, 7-point semantic differential scales were used to measure all trust, believability, persuasion, and attitudinal measures ranging from 1 (low) to 7 (high) except the recall of selling points, number of the product-related thoughts, valance of the product-related thoughts. Subjects were asked to use their own words in 3 minutes to elaborate what are the messages they perceive from the ad regarding the i.S6. The recall of selling points were counted as how many selling points they mentioned. The product-related thoughts were numbered, counted, and evaluated by their valances. For example, if a subject had three positive thoughts and one negative thought, his or her valance of thoughts would be 2 (3-1=2).

4. Data Analysis and Results

4.1 Manipulation Checks

The manipulation checks for reading the stimuli showed that subjects reviewed the ad without skipping under any condition. The manipulation checks for the ad showed all subjects in all conditions read them completely (100%).

4.2 Validity and Reliability of Measures

To assess the validity of measures, factor analysis with a Varimax rotation was conducted to verify that the items included in each construct loaded as expected without strong cross loading [29]. Table 3 contained the summary of the main constructs in the study, including descriptive statistics and the measure of reliability, Cronbach's alpha. The results confirmed that all measures formed only one construct, which verified that the items loaded as expected without strong cross loading. All Cronbach alphas were larger than 0.82, indicating that all measures were reliable. The values of the constructs were computed as the mean of the ratings of the items, associated with each construct. No confounds were detected based on several demographic measures and control variables incorporated in the study including gender, major, education level, how much tennis subjects played, or whether subjects have purchased something online before. In this case, the data analysis focused on testing hypotheses by proposed experimental groups regardless of respondents' gender, education level, and shopping experiences.

Table 3: Summary of Descriptive Statistics for the Main Constructs

Construct	Mean	SD	Reliability
Independent Variable			
Involvement score	4.49	1.25	0.97
Objective knowledge score	8.74	2.13	N/A
Dependent Variable			
Purchase intention	5.22	1.31	N/A
Message involvement	4.70	1.14	0.88
Recall of selling points	2.57	2.07	N/A
Number of thoughts	4.33	2.12	N/A
Product-related thoughts	3.37	2.30	N/A
Valence of Product-related thoughts	3.22	2.46	N/A
Quality of information	4.69	1.19	0.93
Believability	4.94	1.37	0.90
Attitude	4.77	1.28	0.82

4.3 The Effects of Enduring Product Involvement on Processing Online Advertisement

It was hypothesized in the study that medium involved subjects are likely to have higher process measures than low involved subjects. Support was found that more involved subjects did demonstrate the higher process measures to certain degree. The main effects of product involvement in Table 4 found main effects on the number of thoughts, $F(1, 219)=5.017$, $p=.002$, the number of product-related thoughts, $F(1, 219)=4.802$, $p=.003$, and valence of product-related thoughts, $F(1, 219)=4.923$, $p=.003$, generated by the ad. Results in Table 4 showed that subjects with medium-high involvement consistently had higher process measures toward the ad than the subjects with low-medium or low involvement. Highly involved subjects scored equal but not better process measures than subjects with medium-high involvement since highly involved subjects might not need the information or they considered that they already knew a lot. Subjects with medium-high but high involvement became the group that mostly engaged in the processing. The finding seemed to suggest that more involved subjects tended to engage in processing more until the need of information was demolished, which supported the hypothesis 1.

4.4 The Effects of Objective Knowledge on Processing Online Advertisement

It was hypothesized that when subjects are motivated to process information, objective knowledge is related to evaluative and process measures of the ad. The relationship may be negative or positive. The results found support for this proposition. The main effects of objective knowledge in Table 5 found no main effects evaluative measures, and post-hoc analyses found differences among means regarding the message involvement and the quality of information toward the ad. Subjects with high objective knowledge had lower evaluation of the ad than the subjects with medium-high objective knowledge. In other words, when the objective knowledge was low to medium, subjects were easier to be persuaded. When subjects' objective knowledge became the highest, they tended to evaluate the ad lower. In addition, subjects with high objective knowledge had lower message involvement toward the as than the subjects with low-medium objective knowledge. This may mean subjects with highest objective might not think they need more information. In this case, the relationship is negative when the subjects have the highest objective knowledge regarding processing and evaluating the ad while the relationship is positive when the subjects have the low, medium or medium-high objective knowledge regarding processing and evaluating the ad.

On one hand, subjects with high objective knowledge might not need more information while subjects with low objective knowledge might not have the ability to process all the messages, explaining why the process and evaluative measures between subjects with high and low objective knowledge were not statistically different. On the other hand, subjects with high objective knowledge might not be easily persuaded since they have better knowledge to evaluate the messages, supported by the evidence that subjects with high objective knowledge had the lowest purchase intention than other subjects (see Table 5).

4.5 The Effects of Involvement and Knowledge on Purchase Intention

As the study framework suggested, purchase intention would depend on several evaluative measures such as evaluation of the ad, believability of the ad, valence of product-related thoughts from the ad, and attitude toward the ad. The hypothesis 3a was supported as Table 6 revealed that subjects tended to use evaluation of the ad, the valence of the product-related thoughts perceived from the ad, and the attitude toward the ad to make their decisions.

The three components contributed significantly to the regression model (p=.000) and suggested that when valence of the product-related thoughts perceived from the ad was positive (p=.021) and the evaluation of the ad (p=.000) and the attitude toward the ad (p=.018) were high, subjects were inclined to have higher purchase intention. However, subjects with high objective knowledge might have low purchase intention. A negative valence (-2.406) was placed on the coefficient of objective knowledge, which contributed significantly to the regression model (p=.017). This suggested that when objective knowledge was high, the purchase intention was reduced, which supported the hypothesis 3b.

5. Discussion, Implication and Limitations

There are companies that have created Web site and advertisements on the Internet today. They have done so simply because the competition has done so. Many think a poorly constructed Web site is better than no Web site at all. This mistake can cost the company missed business and disappointed customers. Just like a billboard or a magazine ad, consumers will bypass the digital advertising unless there is something available that is really useful and convincing to them. The AMO model is useful because it provides a theoretical umbrella for integrating a variety of otherwise disjointed communications tactics. Consumer research has shown that attitudes toward communications messages moderate attitudes about the products or services in promotional messages [22]. In this case, messages that strike affective responses generate more attention, greater interest, more cognitive responses, higher message recognition, and greater topic recall [25]. AMO model offers a potentially useful framework for conceptualizing and unifying otherwise seemingly disjointed message tactics that can be undertaken to communicate better with consumers. The results in the study provide advertisers with many opportunities of manipulating strategies in forming information based on the levels of consumers' product involvement and objective knowledge. With the significant customers in mind, key questions need to be answered are: will the consumers be motivated to process

the message? Is this issue relevant to the consumers? Are the consumers able to process the message? The answers to these questions will help decide whether a central or peripheral route would be more effective for message persuasion.

One limitation of this study is that the subjects did not actually purchase from the store: they advised a hypothetical friend about purchasing it. It is not clear whether conclusions reached by this study would apply to their own purchasing behavior. It might be that individuals with more at stake (i.e., their own money) would work harder at evaluating not just information but the whole site. The amount of time spent inspecting the message claims and the enthusiasm demonstrated by some of the subjects suggested however that this might not be a major threat to validity. Nonetheless, a study that tests subjects' real purchase behavior will be much more desirable.

Another technique to increase motivation, not studied here, evolves around enhancing the relevance of the message to individuals is the use of value-expressive appeals vs. utilitarian appeals. This technique has been shown to increase attention and message elaboration [17]. MacInnis and Jaworski [22] proposed several propositions regarding A_{Ad} and A_B based on utilitarian needs versus expressive needs. They proposed when the needs are utilitarian, negative feelings will be elicited by salient ad cues, utilitarian appeals, but need not have a negative impact on brand attitudes. However, there will be a negative effect on attitude toward the ad. When the needs are expressive, few negative feelings will be elicited by salient ad cues, expressive appeals. One the contrary, positive feelings will affect both brand attitudes and attitude toward the ad. In addition, they also proposed the "mediational effect of A_{Ad} on A_B will be weaker when the ad stimulates utilitarian versus expressive needs" [22, p.12]. Finally, MacInnis and Jaworski suggested "when needs are utilitarian (expressive) and the consumer is engaged in meaning analysis, salient cues that communicate the brand's ability to solve functional problems (that communicate emotional, symbolic, or ego-related meanings) will serve as heuristic indicators of brand benefits" [22, p.12]. The future study could incorporate all these factors to test the processing of advertisement.

6. Conclusion

The importance of the Internet is its interactive platform that introduces a new way of doing business to the world. The term "interactivity" is best defined as simply two-way communication, rather than merely a delivery mechanism [27]. The concept of interactive media has been developed through the idea of a hypertext medium that opens a new way of communication when, "hypermedia is multimedia with links among the components and a mechanism for moving along the links" [27, p.205]. This platform manipulates links between discrete pieces of information from one channel and synchronizes other information from other channels, which helps advertisers to integrate information from different sources in real time, compared to traditional media. This advantage not only provides many promotional opportunities but also helps online shoppers exercise a certain degree of involvement with what consumers intend to purchase.

The change is so rapid that 1 year on the Internet is like 7 years in any other medium [23]. Now the concept of business communications has multiple and complex dimensions. As communication technologies evolve and browsing information becomes more interactive, personal, and sophisticated, advertising is being forced to evolve and integrated with other forms of communication as well. Due to advances in technology and production, it is very possible there will be no product advantages, no price advantages, no distribution advantages, and no location advantages. Competition will be based on customer information, customer service, and customer preference.

The Internet provides the technology to tailor shopping experience to the needs of the consumer. Advertising specialists are involved in the flow of online information where their consumers are looking for information. Today businesses find it necessary to concentrate on building long-lasting relationships with its consumers. The ability for two-way communication and the near instantaneous nature of the Web make the Internet the medium of choice for relationship marketing. Through carefully designed and coordinated programmatic studies, studies can help better understand how advertising messages generate a consumer's perception of a product or a service. Studies can also help better understand how factors such as motivation and knowledge can provide the basis for effective persuasion.

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Table 4: Main Effects for Product Involvement

	Product Involvement											
	All		Low		Low-Medium		Medium-High		High			
	N=221		N=55		N=54		N=57		N=55			
	M	SD	M	SD	M	SD	M	SD	M	SD	F	P
Process measures												
Message Involvement	4.70	1.14	4.70	1.21	4.52	1.07	4.77	1.09	4.79	1.18	.636	.593
Recall of selling points	2.57	2.07	2.40	1.67	2.13 a	1.80	3.16b**	2.34	2.55	2.28	2.526	.058
Number of thoughts	4.33	2.12	4.13 b***	1.40	3.57 b* a	1.70	5.04 a	2.27	4.55 b*	2.64	5.017	.002
Product-related thoughts	3.37	2.30	3.22b*	1.78	2.61b***	1.89	4.21a	2.60	3.40	2.57	4.802	.003
Evaluative measures												
Quality of information	4.69	1.18	4.59	1.16	4.74	1.09	4.75	1.01	4.67	1.46	.227	.878
Believability	4.94	1.37	4.85	1.31	4.95	1.30	4.88	1.24	5.06	1.63	.259	.855
Valence of thoughts	3.22	2.46	3.07b*	1.87	2.46b***	2.04	4.18a	2.64	3.11b*	2.87	4.923	.003
Purchase intent	5.22	1.31	5.20	1.45	5.28	1.22	5.39	1.10	5.02	1.46	.776	.509

NOTES. Column: means that do not share a common subscript significantly differ; *<.05, **< .001, ***<.000.

Table 5: Main Effects for Objective Knowledge

	Objective Knowledge											
	All		Low		Low-Medium		Medium-High		High			
	N= 221		N= 57		N= 45		N= 77		N= 42			
	M	SD	M	SD	M	SD	M	SD	M	SD	F	P
Process measures												
Message Involvement	4.70	1.14	4.58	1.36	4.99 b*	1.07	4.76	.99	4.41a	1.09	2.218	.087
Recall of selling points	2.57	2.07	2.40	1.94	2.44	2.11	2.55	2.02	2.95	2.29	.656	.580
Number of thoughts	4.33	2.12	4.19	2.01	4.16	2.03	4.31	2.04	4.74	2.48	.700	.553
Product-related thoughts	3.37	2.30	3.21	2.39	3.33	1.99	3.32	2.30	3.71	2.54	.414	.743
Evaluative measures												
Quality of Information	4.69	1.19	4.60	1.29	4.56	1.34	4.94 a	.89	4.49 b *	1.30	1.846	.140
Believability of the Ad	4.94	1.37	4.92	1.44	5.01	1.49	5.08	1.16	4.61	1.50	1.154	.328
Valence of thoughts	3.22	2.46	3.18	2.42	3.16	2.18	3.25	2.35	3.29	3.02	.029	.993
Purchase intent	5.22	1.31	5.37 b*	1.33	5.27	1.34	5.34 b*	1.05	4.76 a	1.61	2.214	.087

NOTES. Row: means that do not share a common subscript significantly differ; *<.05, **< .001, ***<.000.

Table 6: Evaluative Measures on Purchase Intention

Dependent Variable: Purchase Intention			
Cases =221, R-square =.62	Df =6, 214, F =22.475, P =.000		
Independent Variables	Beta (Standardized Coefficients)	T	P
(Constant)	***	5.706	.000
Evaluation of the ad	**.301 *** **	**3.597**	**.000**
Believability of the ad	.124	1.315	.190
Valence of the product related thoughts from the ad	**.131 ***	**2.329**	**.021**
Attitude toward the ad	**.190 ***	**2.375**	**.018**
Average Involvement Score	-.035	-.640	.523
Objective Knowledge Score	**-.130 ***	**-2.406**	**.017**

NOTES. Asterisks represent significance levels: *** p≤0.001; ** p<0.01; * p<0.05.